

## SEMINÁŘ LOGIKY SEMINAR OF LOGIC



Richard Lawrence (University of Vienna)

## Signs and Content in Early Mathematical Formalism

I will discuss the early history of mathematical formalism, the view that numbers are "signs" and that mathematics is a practice of manipulating signs according to rules. I will focus on Johannes Thomae, Gottlob Frege's colleague in Jena, who defended formalism by comparing arithmetic to a game of chess. I will argue that Thomae's understanding of arithmetical signs is rooted in Kant's understanding of algebra and Karl Weierstrass' program of algebraic foundations for analysis. On this view -- contrary to Frege's polemical interpretation, which many commentators have uncritically followed -- "signs" are not arbitrary, meaningless pieces of syntax, but representations from within an algebraic perspective of objects given from a different perspective. This interpretation paves the way for a new understanding of how formalists think about the relation between signs, content, and rules.

## Monday 14/11/2022 | 14.00 CET

Meeting room ("zasedačka"), Institute of Philosophy CAS, Jilská 1, Prague 1 A Zoom link can be obtained from Ansten Klev, <u>klev@flu.cas.cz</u>